

REMARKS

Claims 1-30 are pending in the present application. Reconsideration of the application is respectfully requested in view of the following responsive remarks. For the Examiner's convenience and reference, Applicant's remarks are presented in the order in which the corresponding issues were raised in the Office Action.

In the Office Action of March 27, 2006, the following actions were taken:

- (1) claims 1-3, 5-9, 11-18, 20-24, and 26-30 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,624,484 (hereinafter "Takahashi");
- (2) claims 4 and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Takahashi in view of U.S. Patent No. 6,328,413 (hereinafter "Rutland"); and
- (3) claims 10 and 25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Takahashi in view of U.S. Patent No. 5,764,263 (hereinafter "Lin").

It is respectfully submitted that the presently pending claims be reconsidered and allowed.

Rejections under 35 U.S.C. § 102

The Examiner has rejected claims 1-3, 5-9, 11-18, 20-24, and 26-30 under 35 U.S.C. § 102 over Takahashi. Before discussing the rejection, it is thought proper to briefly state what is required to sustain such a rejection. It is well settled that "[a] claim is anticipated only if each and every element as set forth in the claims is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil of California*, 814 F.2d 628, 2 U.S.P.Q. 2d 1051, 1053 (Fed. Cir. 1987). In order to establish anticipation under 35 U.S.C. § 102, all elements of the claim must be found in a single reference. *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 231 U.S.P.Q. 81, 90 (Fed. Cir. 1986), *cert. denied* 107 S.Ct. 1606 (1987). In particular, as pointed out by the court in *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1981), *cert denied*, 469 U.S. 851 (1984), "anticipation requires that each and every element of the claimed invention be disclosed in a prior art reference." "The identical invention must be shown in as complete detail as is contained in the...claim." *Richardson v. Suzuki Motor Co.* 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989).

Takahashi discloses a liquid composition consisting of a cationic substance of polyallylamine and glycerol. As the Examiner pointed out, Takahashi also teaches an ink-jet ink with an anionic dye colorant. Additionally, the reference discloses the steps of overprinting and underprinting with respect to an ink. The Examiner further points out that Takahashi teaches an ink-jet ink including 0.1 wt % to 5 wt % of a dispersant. It is believed that this is not an accurate characterization of the prior art, in that the dispersant is discussed in the context of printing with pigments. See column 9, line 35.

The present invention is directed towards a system and method for ink-jet imaging that reduces nozzle clogging due to cross-contamination. The disclosure teaches a fluid dispensing system for ink-jet printing comprising an ink-jet ink with an anionic dye colorant and from 0.05 wt % to 1.0 wt % of an anionic dispersant polymer. The disclosure also teaches a fixer composition with a cationic crashing agent that is reactive with a component of the ink-jet ink. The fluid dispensing system can be configured for overprinting or underprinting the fixer composition with respect to the ink-jet ink. Claims are also drawn towards a method for ink-jet imaging including jetting an ink-jet ink from printing nozzles that includes an anionic dye colorant and an anionic dispersant polymer, and jetting a fixer composition from printing nozzles.

The Examiner has failed to present each and every element of the present invention in the Takahashi reference. Specifically, the element of independent claims 1 and 16, from which all other claims depend, requiring an ink-jet ink including anionic dye colorant and from 0.05 wt % to 1.0 wt % of an anionic dispersant polymer is lacking from the reference. Anticipation requires that each and every element of the claimed invention be disclosed in a prior art reference. The Examiner has successfully shown an ink-jet ink with an anionic dye colorant. The Examiner has also shown the use of a dispersant in an ink-jet ink. However, the Examiner has managed to point out a very common use of dispersants – using dispersants with pigmented ink. This use is well known in the art. The Applicant's use of anionic dispersant polymers in an ink-jet ink also containing an anionic dye is novel in the context of the presently claimed invention.

Takahashi does not teach or even infer the combination of an anionic dye with an anionic dispersant polymer. The references to using a dispersant in Takahashi are

specifically in reference to pigment inks. Early in the disclosure, the reference differentiates between dye-based inks and pigment-based inks (see column 5, lines 21-25). Takahashi is very careful to discuss dispersants in use only with pigment inks: "As a dispersant contained in the ink in the case where the pigment is used..." (column 9, lines 35-36), "... used as a pigment dispersant..." (column 9, lines 53-54), "pigment dispersant" (column 9, line 59), "The pigment and the water-soluble resin as a dispersant..." (column 10, lines 3-4), etc.. There is no mention, discussion, or teaching in Takahashi regarding an ink with an anionic dye colorant and an anionic dispersant polymer.

Takahashi is missing the element of an anionic dispersant polymer in a dye-based ink-jet ink and is, therefore, not proper grounds for anticipating the present invention. As this element is present in both independent claims (1 and 16), all claims in the present application require this element and are likewise not anticipated by Takahashi. As such, Applicant respectfully requests reconsideration and withdraw of the rejections of claims 1-3, 5-9, 11-18, 20-24, and 26-30 under 35 U.S.C. § 102 as anticipated by Takahashi.

Rejections Under 35 U.S.C. § 103

The Examiner has rejected claims 4 and 19 under 35 U.S.C. § 103(a) as being obvious over Takahashi in view of Rutland, and claims 10 and 25 as being obvious over Takahashi in view of Lin. The Applicant respectfully submits that these claims are patentable over the cited reference for the reasons set forth below, and that the rejection should be withdrawn.

Before discussing the obviousness rejections herein, it is thought proper to briefly state what is required to sustain such a rejection. The issue under § 103 is whether the PTO has stated a case of *prima facie* obviousness. According to the MPEP § 2142, the Examiner has the burden and must establish a case of *prima facie* obviousness by showing the prior art reference, or references combined, teach or suggest all the claim limitations in the instant application. Further, the Examiner has to establish some motivation or suggestion to combine and/or modify the references, where the motivation must arise from the references themselves, or the knowledge generally available to one of ordinary skill in the art. The Applicant respectfully

asserts the Examiner has not satisfied the requirement for establishing a case of *prima facie* obviousness in any of the rejections.

All of the obviousness rejections are based on Takahashi. As previously discussed, Takahashi is missing a claim limitation. Specifically, Takahashi does not teach an ink-jet ink including an anionic dye colorant and from 0.05 wt % to 1.0 wt % of an anionic dispersant polymer.

The Examiner cited Rutland to remedy Takahashi's deficiency in claims 4 and 19 of a teaching of ink-jet printing nozzles and fixer printing nozzles configured in a proximity such that, upon jetting, small amounts of fixer composition aerosol jetted from the fixer printing nozzles contact the ink-jet ink printing nozzles, thereby resulting in the ink-jet printing nozzles being susceptible to cross-contamination by the fixer composition. Rutland does not teach of an ink-jet ink including an anionic dye colorant and from 0.05 wt % to 1.0 wt % of an anionic dispersant polymer. Therefore, the combination of Takahashi and Rutland is missing a claim limitation.

Likewise, the Examiner cited Lin to remedy Takahashi's deficiency in a specific aspect found in claims 10 and 25. Lin does not teach of an ink-jet ink including an anionic dye colorant and from 0.05 wt % to 1.0 wt % of an anionic dispersant polymer. As with the Takahashi-Rutland combination, the Takahashi-Lin combination does not remedy the missing claim limitation.

As both combinations are devoid of a specific claim limitation, the Applicant respectfully asserts that the Examiner has not established a *prima facie* case of obviousness. Therefore, Applicant requests reconsideration and allowance of the claims.

In view of the foregoing, Applicant believes that claims 1-30 present allowable subject matter and allowance is respectfully requested. If any impediment to the allowance of these claims remains after consideration of the above remarks, and such impediment could be removed during a telephone interview, the Examiner is invited to telephone W. Bradley Haymond (Registration No. 35,186) at (541) 715-0159 so that such issues may be resolved as expeditiously as possible.

Please charge any additional fees except for Issue Fee or credit any overpayment to Deposit Account No. 08-2025.

Dated this 27th day of June, 2006.

Respectfully submitted,



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